

II. SPECIFICATION AMENDMENTS

ABSTRACT

A method and arrangements are provided for transmitting frames of digital information over a wireless communication connection between a transmitter and a receiver. In the transmitter, a certain sequence of bits within each frame of digital information is convolutionally encoded and punctured ~~(112)~~ before transmitting the frame over a wireless communication connection. The receiver decodes and depunctures ~~(211)~~ the sequence of bits within each frame of digital information, that was convolutionally encoded and punctured, after receiving the frame over a wireless communication connection. The transmitter rearranges ~~(411)~~ the sequence of bits within each frame of digital information that is to be convolutionally encoded and punctured, before convolutionally encoding and puncturing ~~(112)~~ it. The rearranged order is one that has been found to produce, during the course of convolutionally encoding with a certain convolutional code and puncturing with a certain puncturing pattern, a convolutionally encoded and punctured sequence where the statistical probability of transmission errors exhibits a predefined behaviour ~~(701)~~. In the receiver, the sequence of bits within each frame of digital information that was so rearranged in the transmitter is inversely rearranged ~~(611)~~ so that the effect of said rearranging in the transmitter on the mutual order of the bits of the sequence is cancelled, after decoding and depuncturing the sequence of bits.

Fig.—4